

# Transformational Leadership and TQM Implementation

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## Abstract

*Several studies have identified leadership as a promoter of total quality management (TQM). In addition, empirical studies have shown significant positive relationship between transformational leadership and working efficiency. Researchers also defend that it is top management duty to lead the movement for quality. In this sense, leaders are expected to define organizational strategy and mission, values and principles that will inspire TQM oriented management practices. This conceptual work explores the relationship between transformational leadership and total TQM – defined by the dimensions of innovation, creativity, trust and teamwork – presenting initial propositions that can guide future research in this area of knowledge.*

**Keywords:** Transformational leadership, TQM, innovation, creativity, trust, team work.

## Introduction

The development and maturation of quality management have led this management area to go beyond its initial industrial domain and to acquire prominence in all activity sectors, including the industrial and service sectors both private and public. Quality has acquired the status of theoretical field of interest for academicians and has gathered significant efforts for its expansion and refinement of its theoretical bases<sup>80</sup>. The development of systems, organizations and associations for quality assurance, as well as the institution of quality awards and excellence models are some of the paradigmatic consequences of the world-wide movement in favor of quality.<sup>20,24,31,86,88</sup> Quality awards not only reward certain organizational practices, but also are meant to suggest process improvement and excellence. These awards (namely the European, American, Canadian, Japanese and Australian) place the criterion of leadership in a prominent place<sup>88</sup>.

The European Foundation for Quality Management (EFQM) raises this dimension when enunciating that excellent organizations have leaders that define and communicate a clear vision for their organizations. In this way, they associate and they motivate other leaders to inspire their collaborators. The structure of the European model is elucidatory, not only because it denotes an assumed relation between leadership and quality, but also because it aims to

explain its general effect on the organizational performance. This premise extends to the other models/awards. The model is based on the relation between enablers and the results in a search of causalities. There is a dynamic relation between enablers and the results, since excellence of the previous will be projected throughout the latter. Excellence on Key Performance Results is dependent on how the organization performs in terms of People, Customers and Society. Excellent results with respect to People, Customers and Society are achieved through Leadership driving Policy and Strategy that is delivered through People, Partnerships and Resources and Processes<sup>1</sup>. This presumable influence was underlined by Deming<sup>28</sup> and Juran<sup>49</sup>. On the other hand, this dimension has been recognized by several academicians, throughout the development of theoretical models and empirical studies.

Waldman<sup>89</sup> assumes that transformational leadership has an influence on TQM policies and practices - continuous improvement, team work and systemic approach – not only direct but also through the organizational culture (Figure 1). Waldman<sup>89</sup> draws attention onto the importance of the persistent leadership, that is, of leaders' continued efforts towards quality. For this reason, the present study aims at exploring the theoretical foundations of total quality, trying to understand how transformational leadership can generate positive impacts on the total quality management model. In this context, it is important to understand the contribution of the transformational leadership to improve management through total quality. To help understanding that contribution, in this paper, and based solely on a review of the literature, we propose some possible relationships.

The propositions presented here need to be empirically proven. In future research it will be necessary, not only, to state the necessary hypotheses, but also, to devise the most adequate variables and corresponding metrics, which will capture the real meaning of the constructs to be used. The fieldwork, necessary for the development of this research, will include capturing expertise and practical opinions, both in leadership and quality areas.

Academicians, researchers, managers and consultants have throughout the years developed or have given their contribution to the creation of new concepts, conceptual pictures of reference and methodologies in the transformational leadership field. However, some questions need to be answered: how to evaluate the contribution of transformational leadership practices for total quality? Is the transformational leadership a style of leadership capable of increasing and developing the dynamics of TQM processes?

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The proposed model focuses on the four main TQM dimensions that are developed through the exercise of a transformational leadership style and that contribute towards the achievement of excellent results: 1) creativity; 2) innovation; 3) trust and 4) team work. Propositions aiming to establish synergic relationships between the transformational leadership style and the model of total quality management are presented as research proposals. Finally, in its last considerations the belief that it is possible to improve performance of total quality organizations is presented.

### Quality Concepts

The discussion on the best definition for the quality concept has been very enlightening and continuous and has come to deserve an ample attention and interest from both from academics and practitioners<sup>74</sup>. The term quality is one of the most used words by the managers and executives of contemporary organizations. The concept has suffered many alterations and meanings throughout time, as many as the

number of phenomena it tried to describe. Thus, taking in account the multiplicity of the phenomena and the studied variables, different concepts of quality are used according to the nature of the phenomena which intend to be described and/or explained.

However, it is possible to summarize the evolution of the concept, in function of its different perspectives. Through the analysis of studies developed by Reeves and Bednar<sup>74</sup>, it was possible to summarize the vast terminology on quality and systemize the different concepts according to four classic perspectives in the literature. These approaches are briefly presented in table 1. The identification of what is excellence is difficult. Likewise, it is also difficult to measure or to control excellence. The definition of quality has moved away from excellence, towards compliance with the requirements and later to the value of money and customer satisfaction.

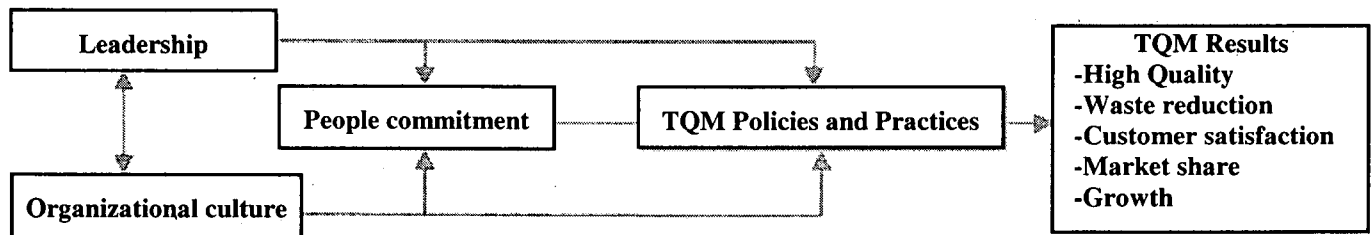


Fig.1: Model that establishes nexus between leadership and Total Quality Management (TQM)<sup>89</sup>

Table 1  
Quality concepts<sup>74</sup>

Concept	Characteristics
Excellence	Older concept; Philosophy of being the best, better than others; Abstract concept.
Value	Second concept; Relates to the relation between price X benefits; Promotion of a product or service depends on various factors (convenience, price, service, needs, among others); Abstract concept
Conformance to specifications	Concept emerged with manufacturing ; Focuses on product standardization; Avoids losses and waste; Controllable quality; The conformity of products compared to the specifications of the project; Product free of deficiency; Focus on monitoring tools; Perfection in production; Objective and quantifiable concept.
Meeting and/or exceeding customer's expectations	Concept has undergone strong influence of the services sector, being the most recent; Product or service that best meets customer's requirements; Characteristic of products and services that meet customer's expectations; Satisfaction of customer's expectations; Abstract concept.

The present study valuates similarly the different concepts of quality. However, it is important to recognize that when the total quality concept is looked upon, the approach focuses the organizational culture capable of meeting and/or exceeding customer expectation<sup>70</sup>.

### **Total Quality Management**

The concept of TQM has evolved with the concept of quality, understanding quality as an opportunity to compete. Currently, the broadest definition of quality not only includes notions of better price, absence of defects, fulfillment of the project, appropriateness of use and customers satisfaction through continuous improvement of available products and services. Total quality control, quality management, excellence through quality and strategic management for quality are some of the denominations found in the contemporary literature, used by companies to define a type of management guided by the aim of satisfying or exceeding client expectations through continuous improvement<sup>64</sup>.

In the perspective of TQM, management philosophy is a dynamic process of continuous improvement, aiming towards the improvement of quality at the level of all organizational aspects, exceeding client expectations, as well as the expectation of other organizational stakeholders. According to Dean and Bowen<sup>27</sup>, total quality is not only a set of slogans and techniques, but a set of principles, practices and techniques, strengthened and integrated with the aim of satisfying the customers. In this perspective, Hill and Wilkinson<sup>43</sup> perceived total quality as a general approach of management, structured by basic principles and a set of practices and techniques guided towards excellence. For Dale, Van der Wiele and Van Iwaarden<sup>26</sup>, TQM is materialized through cooperation among all elements of the organization and is associated to the processes geared towards the develop goods that will satisfy and exceed customers' expectations and needs.

To sum up, total quality combines elements of traditional theories of management with the goal of satisfying customers, through commitment and through the search and implementation of continuous improvement, projecting cultural changes in the organization. There is a strong consensus about the importance of TQM for the competitiveness of a company. For Slack, Chambers and Johnston<sup>81</sup>, TQM has an involving perspective of the environment and the dynamics in what regards necessary improvement so that the company can become more competitive.

Total quality management pursues goals of its external and internal customers' satisfaction, placing a special emphasis on the effectiveness and defining strategic goals which guide the company towards the market. Total quality management affects all the organization, with top management particularly compromised and exerting the

leadership function. In the perspective of total quality management, all the direct and indirect processes of organization are considered. As for the working methods, taking for granted that processes and standards have been established, the most relevant is the definition of a system of management by objectives. For this, the starting point is the base that provides knowledge and the understanding of customer needs and expectation, involving all in favor of the fulfillment of these goals<sup>26</sup>.

For total quality management, the development and the commitment of people are considered as a source of competitive advantage that allows promoting differentiation with competing companies. Continuous training, development of careers, motivation of the collaborators, the delegation of power and, above all the cooperation of team work and organizational development, are guides of TQM in the human resources management. The skills, the adaptation and cohesion through values and shared beliefs, are extremely important mechanisms of coordination<sup>26</sup>.

Thus, those responsible for quality determine the conception and development of the training plan and exert an activity as consultants of other organizations fields. All the team members of top management are responsible for leading the total quality management guaranteeing the well functioning of the system. TQM proposes an action of auto control in the area of responsibility of the different collaborators. Total quality management is exerted, over all, through a leadership share, fomenting a participative management style. In this way, total quality management inhabits multiple individuals and teams that administer them since only this level of leadership and participation guarantee this form of management<sup>26</sup>.

### **Transformational Leadership**

Different research studies have shown that leaders can make a significant difference in the performance and efficiency of work teams and companies<sup>63, 94</sup>. Thus, leadership transforms potential into reality<sup>67</sup>. In fact, studies of Salas, Sims and Burke<sup>78</sup> include leadership as one of the great five contributions for the efficiency of the enterprise through the performance of team work. The research has concluded that leaders have major roles in developing effective team work, and also in establishing basic principles, necessary for well functioning working processes<sup>21</sup>. Robbins<sup>77</sup> defines leadership as the capacity to influence a group to reach goals, considering that not all leaders are managers nor all executives are leaders. Leadership consists of a process of influencing and supporting other people so that they work enthusiastically in the path of established goals<sup>67</sup>. In short, it is consensual that leadership is an essential part of the work in organizations, contributing in a decisive way towards its development.

There are several theoretical approaches to leadership, but one of the best known and contemporary

models is the transformational/transactional leadership. This model fits in the scope of the neo-charismatic theories<sup>77</sup>. These theories emphasize the symbolism, the emotional approach and the extraordinary commitment on behalf of its followers. Understood as the new paradigm of leadership<sup>18</sup>, the distinction between transformational and transactional has received enormous attention<sup>30</sup>. In fact, Bass<sup>6</sup> distinguishes between transactional and transformational leadership - which some consider dimming the distinction between leadership and management<sup>71</sup>.

However, several authors<sup>5, 45</sup> exclusively emphasize the role of transformational leadership. Transformational leaders inspire their followers in exceeding their own interests in favor of the organization, being capable of causing a deep and extraordinary effect on their followers. These leaders give special attention to the concerns and needs of their follower's development; they are capable of modifying the way in which followers perceive situations, and are capable of promoting enthusiasm, to stir up and to inspire people in giving their maximum in order to reach the group's goals<sup>77</sup>. The transformational leadership is supported by a strong personal identification with the leader and by a common vision. It is about a relationship that involves pride, respect and faith in the leader. Transformational leaders delegate, transmit courage, inspire collaborators and support development.

These leaders exert strong influence and are admired, respected and trusted; they recognize the needs of their followers, gain credits, share risks and they are consistent in their behavior, giving emphasis to ethics, principles and values. On the other hand, through charisma, the transformational leader influences the individuals to initiate and to undertake a set of shares/behaviors in a sustained way<sup>67</sup>. The transformational leader tries to infuse in his followers the capacity to question not only the established beliefs, but also those established by the leader<sup>4</sup>. The transformational leaders express expectations of high performance, using symbols and a provocative language capable of inspiring others<sup>65</sup>. The behavior of this type of leaders foments in followers strong emotions and feelings of identification.

The inspirational attitude is another characteristic of the transformational leaders: they motivate those around them and give a meaning to their work; they promote the individual spirit and team work; they encourage followers with attractive perspectives of the future, stimulate the use of symbols so followers can focus on perfecting the right behavior; they stimulate the effort of their collaborators; they promote the initiative, the creativity and stimulate the collaborators to place questions, to debate problems and to look at old situations as being new and do not criticize or ridicule publicly neither when there are individual errors. The transformational leaders create and communicate a vision for the organization<sup>82</sup>. This vision makes people go beyond their

capacities and thoughts and encourages them in the sense of assuming new levels of commitment and enthusiasm, integrating beliefs and values, necessary towards the change of a guided organizational culture for performances of high income<sup>67</sup>. Thus, the behavior of this type of leader increases the conscience on problems and influences the followers to look at them under a new perspective. In periods of higher turbulence and change in organizations, the relationship that the leader establishes with its subordinates, assumes particular prominence. In accordance with Bennis<sup>11</sup>, the leaders with higher capacity of adaptation work jointly with their followers and increase their responsibility.

Transformational leaders act as mentors and trainers, they pay attention to each individual's needs so that this one can develop and grow. Chances of learning are created in a supportive environment, in order to promote growth. The individual differences in terms of needs and desires are recognized. The leader supports, encourages and accompanies followers. Transformational leaders recognize that their legacy is not simply about change itself, but about an organization that will continue changing. Their critical task consists of developing people's capacity to learn from the change experience (double-Loop learning - the way in which information is processed does not only reflect current information - first level, but also prepares participants to manage future changes in more efficient way - second level). Thus, these individuals develop the capacity of anticipating problems, preventing the appearance of adverse situations, defying their own certainties and paradigmatic limits<sup>3</sup>. Different authors<sup>7, 51, 83</sup> have concluded that the way in which the transformational leaders communicate vision and recognize the need for change, induce followers into obtaining more than what was previously expected, aiming for extraordinary results.

This type of leader's personality is characterized by certain interests and traces, such as, self-confidence and determination and his experience throughout life is preponderant in his development, namely for the differentiation of individual traces. According to Bass<sup>7</sup>, the transformational leaders have the will to encourage and to look at old problems in a different way. They are people who can remove and strengthen their energies, they are owners of their own destiny and have several talents that make them overcome successfully, less favorable times and of great adversity. Transformational leaders have the capacity to promote and accompany personal interests of their followers, to promote commitment of the group/organization's goals, motivating people to go beyond their own interests in favor of the group/organization's interests<sup>29</sup>. The fact that transformational leaders have more energy to stimulate change, not being so worried about keeping the state of things and the status, this makes them people with higher standards of audacity, with more capacities for introspection and meditation. In summary, transformational leadership is focused, according to Bass and Avolio<sup>8</sup>, in motivating and inspiring followers to

perform beyond expectations and incorporate four main factors: 1) idealized influence (or charisma); 2) inspirational motivation; 3) intellectual stimulation, and 4) individualized consideration – Table 2.

Yukl<sup>93</sup> and Bass et al<sup>6</sup> have concluded that the transformational leadership can predict the performance. This idea was developed by House and Shamir<sup>44</sup> that identified four fields of direct influence of the transformational leadership in performance: 1) promote the intrinsic value to achieve the proposed goals; 2) the intrinsic satisfaction of the followers' participation in the leader's mission; 3) increase of the involvement through the leader's vision; and 4) bigger involvement of the followers.

The ethical and moral referential is a determinant factor in the transformational leadership, in such a way that Bass and Steidlmeier<sup>10</sup> introduced the expression of authentic transformational leadership. Leaders can adopt identical transformational behaviors and even promote identical consequences, but it is the underlying value that distinguishes who is an authentic transformational leader (Table 3). It is based on these transformational leadership specificities that it can be distinguished from transactional leadership.

This perspective is supported by authors such as Bass<sup>7</sup> that consider transformational leadership as being more effective than transactional leadership and that the effective

leadership, at its higher level, needs to go beyond the simple binomial reward-punishment that characterizes the transactional leadership. In addition, Jung<sup>47</sup> also concluded that teams which have a face-to-face leader tend to exceed the performance of teams lead by a transactional leader. The transformational leadership is, for example, strongly correlated with lower rate of rotation, greater productivity and greater satisfaction of the individuals<sup>45, 61</sup>. Two other relevant studies related increases in performance efficiency associated with transformational leadership.

In the first study, within a context of interpersonal face-to-face relationship, Jung and Sosik<sup>48</sup> found out that transformational leadership developed empowerment, group cohesion and the principles of the group's efficient functioning. Lim and Ployhart<sup>59</sup>, on the other hand, carried out a study and its aim was to analyze the competition among teams and concluded that transformational leadership was strongly related to excellent team performance.

Beyond the referred studies, meta-analyses on the transformational and transactional leadership were carried out. One of the meta-analysis considered that even though both styles contribute positively to performance, the results generated by the transformational leadership were significantly more relevant<sup>61</sup>. A more recent meta-analysis, carried out by Judge and Piccolo<sup>46</sup>, considered that transformational leadership was a consistent style of

**Table 2**  
**Components of transformational Leadership<sup>25</sup>**

Idealized influence	Inspirational leadership	Intellectual stimulation	Individualized consideration
The leader adopts behaviors that stimulate strong emotions in their followers, feelings of trust and identification towards them, influence their beliefs and aspects bigger than life	The leader communicates a stimulating vision, uses symbols promote followers' efforts, acts like a role model, generates optimism	The leader stimulates followers and induces consciousness of problems, one's thoughts and imagination. Helps them to recognize their own beliefs and values. Develops innovative/creative thinking	The leader takes into consideration the followers' needs of development, supporting, encouraging, training and trying to develop their capacities, providing them with feedback and responsibilities.

**Table 3**  
**Characteristics of the authentic transformational Leader<sup>75</sup>**

Idealized influence	Inspirational leadership	Intellectual stimulation	Individualized consideration
<ul style="list-style-type: none"> <li>Organizes its need of power so followers' and the organization can both benefit from it</li> <li>Willing to make sacrifices</li> <li>In general, is honest and trustworthy</li> <li>Promotes policies, procedures, processes</li> <li>Appeals to fraternity</li> </ul>	<ul style="list-style-type: none"> <li>Develops values of loyalty, justice, honesty, human rights, truth, weakness, harmony and honest work</li> <li>Is focused on the collaborators' development</li> <li>Is both internally and externally worried about the well being of the group, the organization or the society as a whole</li> </ul>	<ul style="list-style-type: none"> <li>Helps followers to have a critical view and to generate more creative solutions</li> <li>Persuades others based on merit</li> <li>Tolerates and develops different points of view</li> </ul>	<ul style="list-style-type: none"> <li>Provides collaborators with support, mentorship and opportunities to grow</li> <li>Aims at developing leadership skills. Helps them to be more competent and to succeed</li> <li>For them, people are a means to an ends</li> <li>Treats each follower as an individual</li> </ul>

leadership. In summary, although both transactional and transformational leadership are associated, transformational leadership tends to be most effective<sup>42</sup>.

### Transformational leadership as a TQM development factor: innovation, creativity, trust and team work

Modern companies emphasize the skills and qualifications of human resources. At the same time they break with the traditional model, in adopting new production models, in which they practice principles such as autonomy, creativity, innovation, trust, teamwork, motivation, versatility, among others<sup>53</sup>. The performance in the organizations is the result of goals established by the leaders and the level of people involvement<sup>55</sup>. According to Quinn<sup>73</sup>, in these companies leadership is of a transformational type, it focuses on human resources and innovation and defines goals which try to motivate individuals in order to reach excellence and effectiveness of performance. Transformational leaders define learning goals, change and high performance related to the sustainability of the organization<sup>60</sup>.

focuses on four of the main dimensions developed by the transformational leadership style is proposed (Figure 2). These dimensions: 1) creativity; 2) innovation; 3) trust and 4) team work contribute to excellence results through total quality management practices. Other dimensions could, of course, be an object of study. Total quality becomes the center of the company's culture capable of assuring satisfaction and exceeding the customers' expectations<sup>74</sup>, by complying with the established requirements, providing the customer with a feeling of excellence at a reasonable price.

But is it possible to establish a causal relationship between transformational leadership practices - through the exercise of skills in the technical and behavioral areas of management - and achieving total quality in organizations? To answer this essential question, the conceptual relation between the transformational leadership and total quality management is explored - at the level of the dimensions: innovation, creativity, trust and team work. The propositions that are presented here lack empirical validation, but suggest the development of future research within this field of knowledge.

Based on the review of the literature, a model which

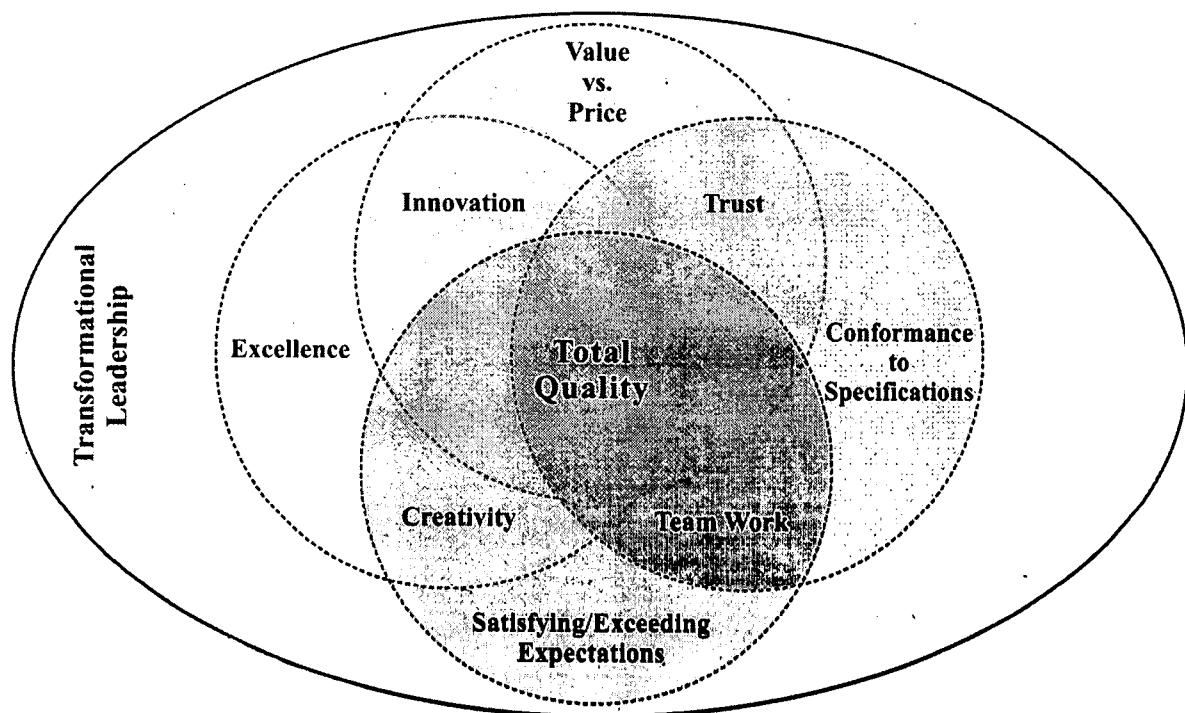


Fig. 2: The impact of transformational leadership on the development of total quality management

#### Total quality is determined by creativity

Quality can be understood as meaning conformity, consistency and reduction/absence of variance<sup>74</sup>. Quality implies the existence of a planning system, routines and verification actions, controlling processes within pre established limits. Quality management can be interpreted as a rigorous planning focused towards the reduction of

uncertainty, by using plans, programs or systems of statistical control.

However, it is worth mentioning that the promotion of creativity is an important factor in total quality management<sup>85</sup> through which people put in practice what has been learnt. The company's environment should stimulate,

facilitate and value new creative ideas capable of optimizing resources, processes and new functions of the products - generating added value to the customers. Quality must create the necessary conditions for the appearance of creative solutions. However, it is important to refer that that individual, cultural and structural factors can facilitate or inhibit creativity<sup>92</sup>.

Kanter<sup>50</sup> indicates a list of environmental factors that contribute to asphyxiate total quality: limited resources and tools; top-down control commands; restriction of formal channels towards change; unbudgeted practices; blurred innovative activity; reinforcement of the inferiority culture; poor lateral communication; and predominance of the vertical restrictive relations. Creativity helps improvisation, being important to note that improvising does not origin a false solution. "Improvisation implies the existence of a structure where problems are analyzed and unforeseen problems are solved and where the organization is built in a way that it is capable of replying to non anticipated situations nor accommodated by planning"<sup>32</sup>. Improvisation shows thus a useful concept for the total quality management. It combines the existence of a structure and planning with flexibility of solving problems or situations that were not anticipated. Consequently, planning and learning must coexist in the organizations<sup>16</sup> creating a good strategic planning particularly in unstable environments.

Culture basically manages the standard of shared values, beliefs and rules that regulate behavior, creating a set of instruments, structures, processes and symbols<sup>79</sup>. Top management cannot change culture in a direct way, but it can intervene by changing the structures and processes, supplying models and strengthening the preferred styles of behavior. Thus, to build a creative environment it is necessary to establish a systematic development of organizational and political structures, procedures of communication, systems of rewards and recognition, training policies, accounting and measuring systems and competing strategies.<sup>23, 58, 67</sup>

Stimulating creativity is excellent to develop new possibilities in order to solve certain problems<sup>19</sup>, which are often due to an effort done on behalf of the organization in a more or less continued way, to develop its economic and social potentialities. According to Grant, Shani and Krishnan<sup>39</sup>, total quality recognizes and values one of the human beings' basic needs, which is the need for creativity. Hence, with respect to the relationship between creativity and TQM implementation, the following proposition is presented:

**Proposition 1:** Transformational leadership practices contribute positively for the relationship between creativity and TQM implementation. In other words, it is expected that management practices, associated with transformational leadership, stimulate the systematic development of measures and management actions capable of rewarding and stimulating creative behavior.

## Total quality results of the innovation capacity

Inspection was the first approach to quality<sup>14</sup>. In this way, checking the process output would be the only to solve quality imperfections. Thus, the quality would be a matter of reaction. Another perspective considered that more than to detect errors after they had occurred, managers should anticipate them and remove their potential causes. This preventive approach<sup>37</sup>, instead of considering the existence of an acceptable error, aims at "zero" errors. Thus, quality was perceived as the absence of failures. Being errors detected either by prevention or inspection, the aim was to prevent out of specification products reaching the consumer. However, not denying the importance of preventing what can be anticipated and of examining what cannot be foreseen, another way to understand quality looks at process improvement as a source of value creation for the customer. Therefore, quality is obtained through cost reduction and continuous improvement. Thus, what matters is not only to reach "zero" errors, but also learn and to improve continuously and follow market's dynamism. This perspective helps minimizing damages of adopting and incorrect use of quality (e.g. fashion), which will neutralize potential positive effects, through routines generated by procedures maintained just for the sake of efficiency<sup>91</sup> and not necessarily for the creation of value for the customer.

The informal learning and empirical experimentation are important since they often translate the ways by which the organizations develop their knowledge, being able to introduce innovations and to grow in the markets where they are already installed or to enter new markets. These are the skills which define the type of problems that companies are capable of solving for real and potential customers<sup>22,68</sup>. In these terms, it is possible to conclude that products are expression of entrepreneurial skills<sup>57, 72</sup>. Skills, potentially capable of generating innovation, are dynamic and generate new routines capable of subverting the procedures installed in the organization<sup>69</sup>. The mobilization and management of knowledge depends on the mobilization, at a much higher level, for participating in the solution of innovative problems<sup>36</sup>.

Innovation can be represented as a learning cycle, involving experimenting process, experience, reflection and consolidation. To manage this process, it is important to create the conditions so that learning opportunities emerge and are explored. Therefore, developing the ability to manage this cycle of learning, such as in the development of new products or new technological processes, is a critical factor<sup>15</sup>. Successful innovators review and take decisions, internalizing specific routines to manage the innovation challenge. It is therefore important to promote the functioning of a learning cycle towards acquisition and absorption of the technological knowledge, but also of a cycle regarding learning and improvement of the innovation process itself<sup>2</sup>. Innovate means understanding the capacity to interpret the market, understanding the desires and needs of present and potential



customers and supplying products and/or excellent services at a fair price.

As a consequence, it is assumed that there is a relationship between innovation and TQM implementation. This relationship is presented in the following proposition:

**Proposition 2:** Transformational leadership practices contribute positively for the relationship between innovation and TQM implementation. Specifically, it is expected that management practices associated with transformational leadership take their own product/process and its improvement as a source of creation of value for the customer and therefore of quality through the reduction of costs and/or increase of quality, stimulating the organization to learn and to improve continuously.

### Total quality is determined by trust

Trust is a central subject of contemporary management<sup>52</sup>. Initially, management for quality was based only on the use of forms of organization and control orientated towards standardization and on the application of norms which turn trust into an unnecessary element. Thus, one of the necessary conditions for the implementation of quality management was related with the existence of a set of norms and control capable of reducing variability. In this case, more than trusting the rationality and collaborators' decision capacity, it is important to create a context where subjectivity of personal decisions is eliminated and substituted by the rationality of the system itself.

On the other hand, one of the necessary conditions for the implementation of quality management is the existence of a reliable environment and a common purpose<sup>85</sup>. Distrustful employees will have defensive behaviors and they will not present the necessary commitment towards the organization in order to set off the principles of total quality. The creation of balanced teams is only possible if there is trust among its members, harnessing high levels of autonomy necessary for its good performance<sup>66</sup>. Thus, the control mechanisms give place to trust and to pressure of the group in the sense of respecting the common goal of the team and the organization itself. The trust in the team and the belief in the organization and its goals, is a basic requirement to develop total quality.

When, through the communicational process, both parts establish a relation that considers the interests of both; this strengthens a relationship of trust<sup>87</sup>. Once a relationship of trust among leaders and followers is established, the necessary conditions which lead towards the establishment of a commitment are strengthened through the process of negotiation, definition and acceptance of goals<sup>38</sup>. Trust and credibility adjust the access of the leader to knowledge and cooperation<sup>95</sup>. Showing trust in the other person creates reciprocity. The efficient leaders slowly consolidate trust and encourage the followers to answer in the same way. In the

organizations, trust should facilitate team work<sup>41</sup>. TQM requires the existence of a normalized structure and minimum levels of reliability. In order for leadership being efficient, there must be coordination, commitment and negotiation based upon respect and trust<sup>60</sup>. It becomes apparent that there is a relationship between trust and TQM implementation. As a consequence, the following proposition is presented:

**Proposition 3:** Transformational leadership practices contribute positively for the relationship between trust and TQM implementation. It is expected that management practices associated to transformational leadership are directly related to the development of trust relationships capable of increasing levels of commitment (focusing on goals of high income), share of knowledge and cooperation among people.

### Total quality is determined by team work

It seems that quality implies the existence of high levels of control. The importance of consistency and reliability of the products/services makes control crucial for the quality management. The importance of control is explicit in the quality literature. Variance is the main cause of quality problems, having for this reason to be controlled<sup>41</sup>. Management must always improve the understanding of the variance causes, as well as exploring the information contained within the variation<sup>28</sup>.

On the other hand, quality requires the participation of the individuals (e.g. box of suggestions) and of teams (e.g. quality circles). Individuals and teams tend to present better results when they have autonomy or control of their work. Research shows that one characteristic of motivating functions is the high level of autonomy<sup>40</sup>. Thus, it is expected that collaborators are active participants. In this context, the most used quality management technique<sup>41</sup> is to form a work team followed by training. Quality circles and meetings for quality among managers and collaborators are examples that illustrate the importance of the participation and the involvement of all collaborators in an organization.

TQM implies high levels of autonomy and control. In the control systems only some elements are defined (e.g. deadline, responsibilities and goals), the remaining are managed by the team. In this type of structures (teams) a small number of great rules exist<sup>17</sup>. The function of the leaders and managers consists of looking out for the respect and fulfillment of the set of rules established in the organization. The work team uses a space of control and crucial autonomy for the fulfillment of its functions.

No matter how good quality systems are, their probability of success is highly conditioned by the organizational structure. Frequently, it is necessary to create and/or to recreate structures and organizational processes that allow the good functioning of the organization, through total quality management. In general, the less programmed and more uncertain the tasks are, the greater the need to make the



structure of relations more flexible<sup>84</sup>. The greater the uncertainty and the complexity of the environment is, the greater is the need to have flexible structures and suitable processes<sup>56, 62</sup>. The main challenge for total quality management consists of adapting the structure to the variability of circumstances.

Another vision of the structure considers that it is a originator of people beliefs and of the way they behave: if there is a good adaptation, the structure will facilitate and strengthen the behavior guided towards the total quality; if it contradict beliefs, then it is possible that it can act as a brake to total quality. The company also is perceived as a cell that establishes connector links with other organizations. Thus, net work represents an efficient solution to the problem of resource scarcity linked to total quality. Research on the teamwork in inter-organizational teams indicates that there are eight key processes that need to be managed, and must be treated as if they were part of the organization<sup>13</sup>: development of networks; decision making; conflict resolution; treatment of information; caption of knowledge; motivation/persistence; allotment of risks/benefits; and integration. The EFQM Excellence model, for example, indicates that leadership must be carried out at all levels of the organization and should result from teamwork<sup>33</sup>.

Finally, assuming that there is a relationship between team work and TQM implementation, the following proposition is presented:

**Proposition 4:** Transformational leadership practices contribute positively for the relationship between team work and TQM implementation. It is expected that management practices associated to transformational leadership are directly related to the development of teamwork, capable of increasing levels of autonomy and control, guaranteeing, simultaneously, the respect and fulfillment of a set of organizational rules orientated towards quality.

## Conclusion

When reflecting on the new challenges of management and on the way organizations should be managed, it is not possible to ignore the importance of anticipating changing scenarios to define its future strategy. This strategy should integrate management domains, such as knowledge management, change management, risk management, innovation management and total quality management among others.

Total quality is a responsibility for all, in general, and of the top management in particular. The necessary efforts towards the implementation of a philosophy based on total quality should start at the top of the organization. The process of quality implementation should be applied in a descending form (top down). The objectives and strategies "must be developed and deployed down through the organizational hierarchy."<sup>26</sup>

Some academic research has supported the idea that top leadership management is necessary to improve quality<sup>12, 35, 55, 80</sup>. But which leadership style is more effective? And how can leadership not only initiate quality efforts but also assure that quality is implemented in a sustainable way? The Baldrige model supports the concept of visionary leadership as one of its main keys. The visionary leadership is associated to transformational leadership and opposes transactional leadership.<sup>6, 54, 55</sup>

There are other emergent topics related to leadership that create opportunities of research in the quality field such as the theory of emotional intelligence<sup>34</sup>. Trust is another emergent subject in leadership and consists of the positive expectation that the other will not take advantage of<sup>77</sup>. The leaders can help to create a reliable environment that promotes the inter-functionary contribution<sup>90</sup>. Another important research field is the development of leadership and succession planning and its influence in quality. The construction of a model that defines the relations of causality between social variables and behaviors is a challenge that is imposed to those who intend to evaluate the effect of total quality management on a daily basis and of leadership management on TQM.

The shift from a management style based on control attitudes and commands to a style characterized by attitudes of transformational leadership generates a positive impact in the TQM model<sup>55</sup>. The reflections presented here go in this direction. In fact, it is expected that leaders define the mission and the organizational strategy, establish values and management principles inspired in the best management practices leaning towards total quality. Thus, with the objective of deepening the study of the relationship between transformational leadership and total quality management - at the level of the dimensions innovation, creativity, trust and teamwork - a set of propositions are presented here. However these propositions lack empirical validation.

The propositions presented here must be empirically tested with particular incidence on the relation - positive and significant - between innovation, creativity, trust and teamwork and TQM. In this way, it becomes absolutely necessary to develop research projects that test the presented proposals, helping to confirm and to strengthen its assumptions so that the model can be generalized.

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